



# **JOINT INTEROPERABILITY TEST COMMAND (JITC)**

## **Interoperability Certification Process Overview**

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# OVERVIEW

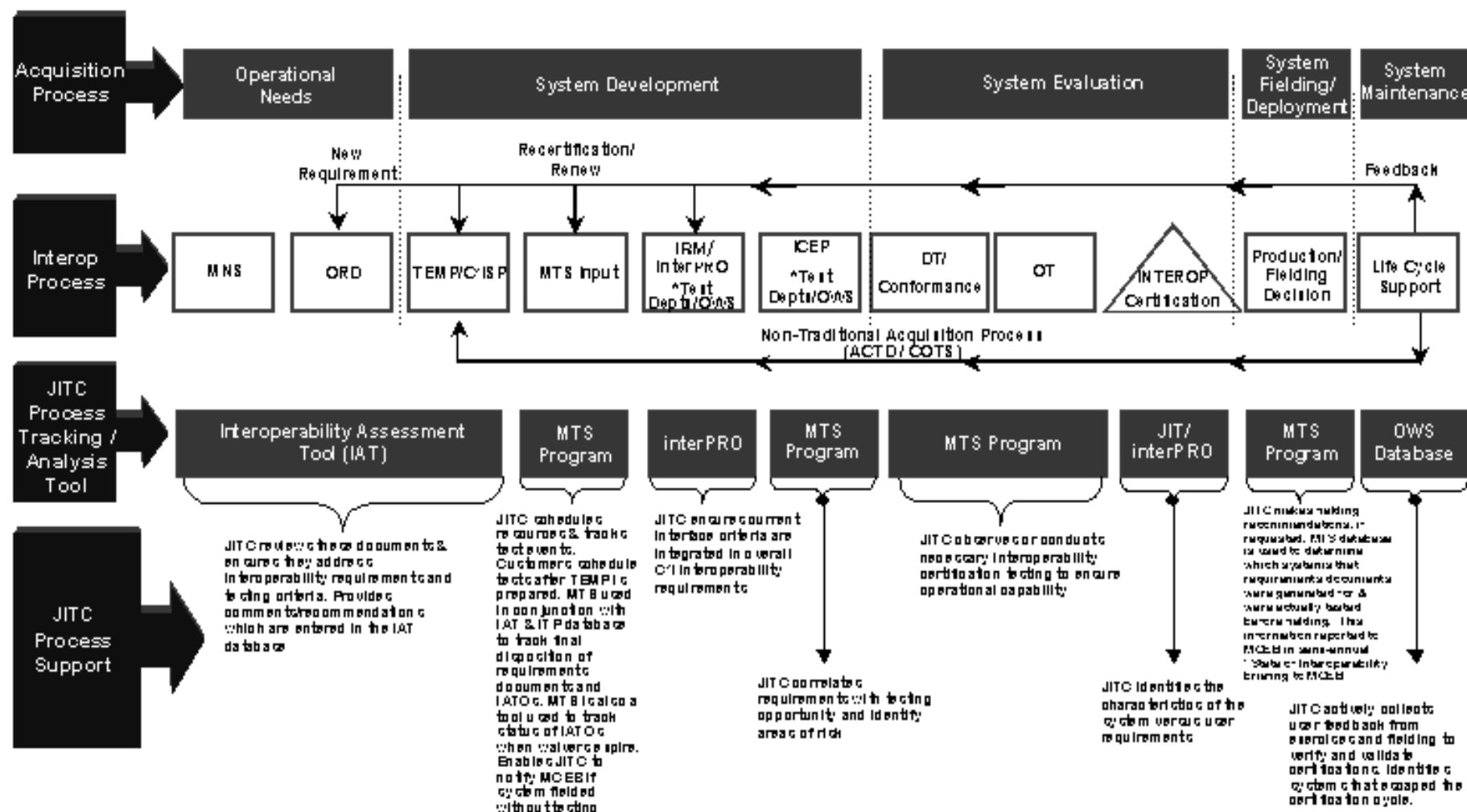
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- **JITC Certification Process**
- **Joint Interoperability Directives**
- **JITC Test Philosophy & Process**
- **Certification Status Reporting**
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- **Conclusion**



# JITC Certification Process





# Joint Interoperability Directives



## DODD 4630.5

Forces must have interoperable NSS and ITS.

## DODD 5105.19

DISA shall ensure end-to-end interoperability.

## CJCSI 6212.01B

JITC is the sole NSS and ITS joint interoperability certifier.

## JCS Pub 1-02

Interoperability is the ability of systems, units, or forces to provide services to and accept services from other systems, units or forces, and to use the services so exchanged to enable them to operate effectively together.

## DODI 4630.8

All NSS and ITS are for joint use and shall be certified by DISA in the acquisition process.

## CJCSI 3170.01A

Mandates interoperability KPP for CRDs and ORDs.

## DOD Regulation 5000.2-R

JITC shall certify that NSS and ITS meet applicable requirements for interoperability and supportability.



# Joint Interoperability Directives

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- **“All C4I systems having joint interoperability requirements, regardless of ACAT, must be tested and certified by JITC” DOD 5000.2R**
- **“All C4I and ISR systems for the purposes of compatibility and interoperability and integration are considered joint” CJCSI 3170.01A**
- **“All NSS and ITS, regardless of ACAT, must be tested and the test results certified by DISA (JITC)” CJCSI 6212.01B**
- **“Interoperability testing and test certification must be addressed as an integral part of the requirements generation process prior to production and fielding approval by the MDA at all ACAT levels” CJCSI 6212.01B**



# Joint Interoperability Directives

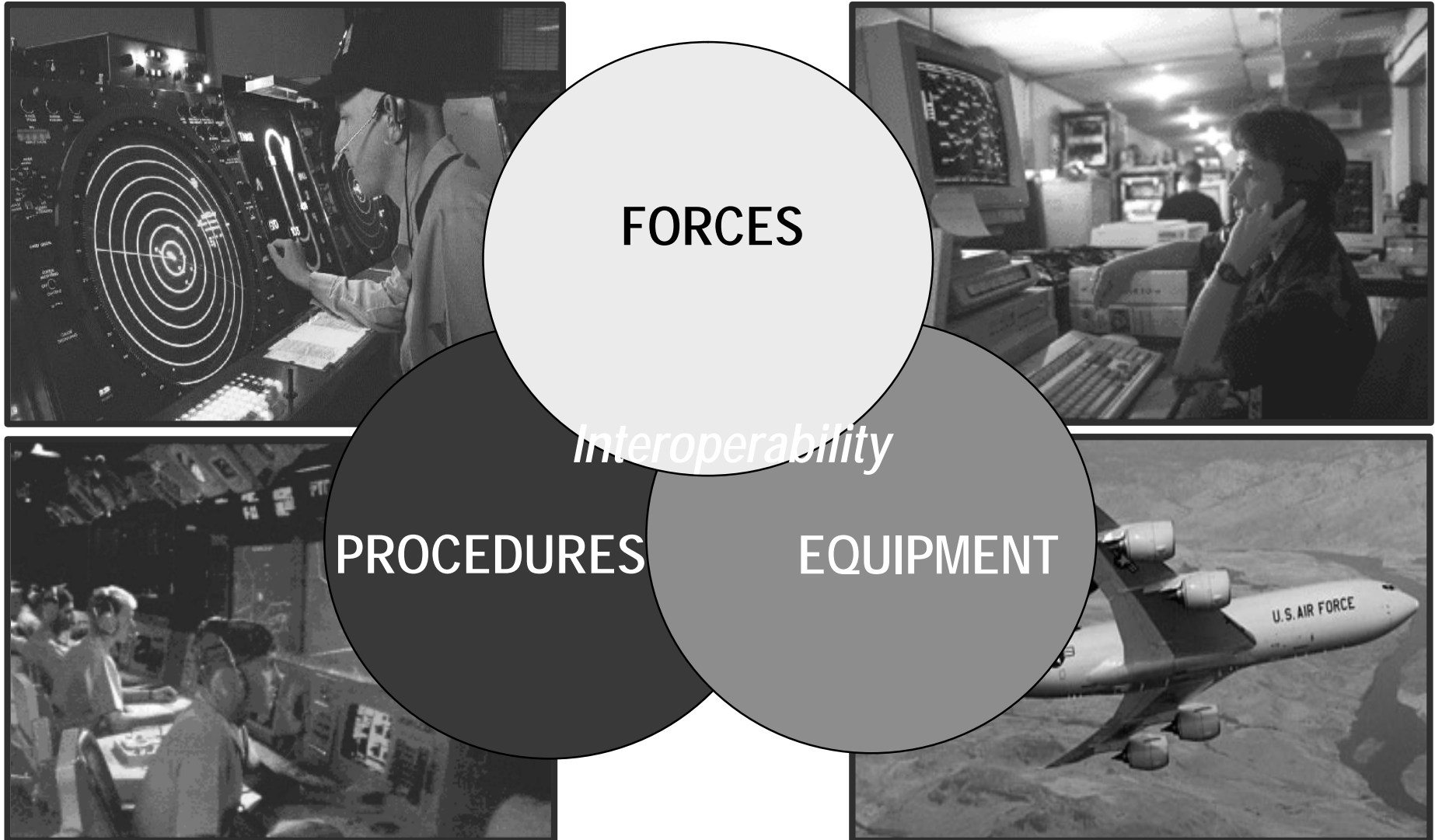
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- **“For commercial-off-the-shelf systems and software not requiring formal acquisition review, Service-sponsored interoperability testing and DISA (JITC) certification will be conducted prior to IOC.” CJCSI 6212.01B**
- **“JITC is the sole NSS and ITS joint interoperability certifier.” CJCSI 6212.01B**
- **“When DISA (JITC) is not the interoperability testing organization, interoperability test plans, test analysis, and test reports will be coordinated with and approved by DISA (JITC) to ensure sufficient information is available to allow DISA (JITC) to certify a system.” CJCSI 6212.01B**



# JITC Test Philosophy & Process





# **JITC Test Philosophy & Process**

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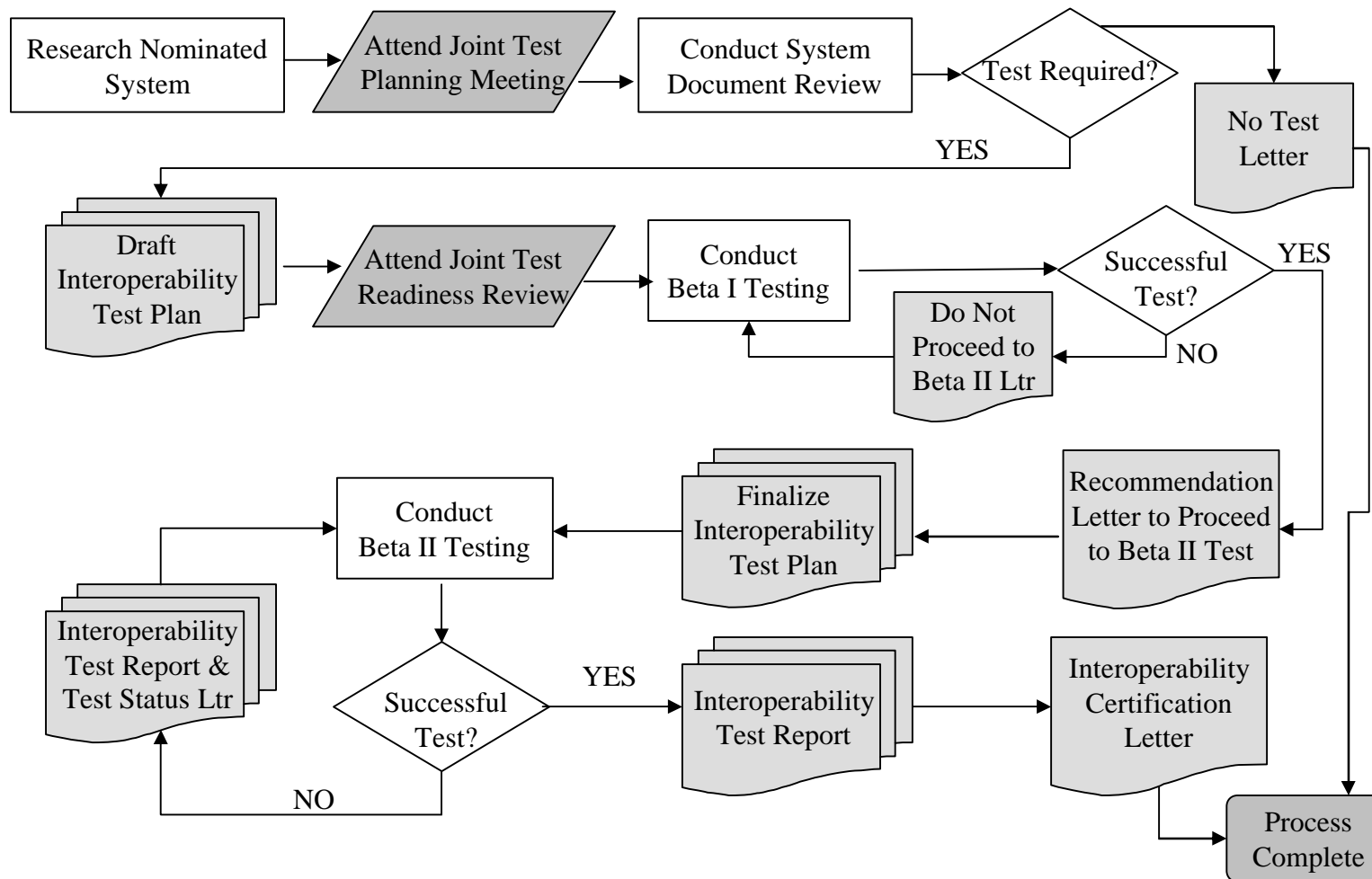


- **Requirements and interface document review**
- **User requirement identification and confirmation**
- **Interoperability requirement's determination**
- **Interoperability Requirement Matrix (IRM) creation**
- **Matrix coordination with community**





# JITC Test Philosophy & Process





# JITC Test Philosophy & Process

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- **Prepare an Interoperability Certification Evaluation Plan (ICEP)**
  - Based on requirements documents or users input to develop criteria and IRM
  - Review of planned testing to be done (PM, DT & OT)
  - Determination of which interface criteria can be addressed during scheduled testing
  - Determination of level of JITC involvement for certification determination
    - Participation in C/S/A test planning, review of test data, results and reports
    - Participation in a planned test event using a separate JITC Plan
    - Conduct a separate interoperability test event



# Certification Status Reporting

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- **Full System Certification**
  - All critical interfaces certified
  - No operational impact expected from non-critical interfaces
- **Certified for Specified Interfaces**
  - Some critical interfaces not certified (not tested or failed)
  - Address Operational Impact of non-certified interfaces
- **System not Certified**
  - No critical interfaces certified (not tested or failed)



# Certification Status System Certified



“The Dissemination Element Version 3.0 (DE V3.0) meets all of its critical interoperability requirements, and is certified as interoperable for joint use.”

## Interface Interoperability Status

SYSTEM	VERSION	CRITICAL	STATUS	REMARKS
EPS	26	Yes	Certified	Met all requirements
IDEX II	5.4.b	Yes	Certified	Met all requirements
IESS	4.1	Yes	Certified	Met all requirements
IPL	2.1.1	Yes	Certified	Met all requirements
NL	2.0.1	Yes	Certified	Met all requirements



# Certification Status Specified Interfaces Certified



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- **Not Certified**
    - **Did not meet criteria**
      - **Critical or Non-critical**
      - **Impact Assessment on operational architecture**
        - **Minor:** little or no overall consequence to user's missions
        - **Moderate:** may cause delays or degrade performance, but are unlikely to cause mission failures
        - **Significant:** may lead to mission failure
    - **Not Tested**
      - **Interface not fielded**
      - **Interface not available at test sites**
        - **Impact Assessment on operational architecture**



# Certification Status

## Specified Interfaces Certified



"The Joint Targeting Toolbox Version 1.0 (JTT V1.0) meets some of its joint interoperability requirements and specified interfaces are consequently certified. However, the overall system is not certified because several interfaces remain untested."

SYSTEM	VERSION	CRITICAL	REQUIREMENTS DOCUMENT	STATUS	REMARKS
5D	4.0.4.4	Yes	JTT CONOPS	Certified	Met all interoperability criteria.
IPL	1.0	No	JTT V1.0 ICD	Not Tested	IPL V1.0 is a legacy system and is no longer deployed. Operational impact is minor because imagery requirements can be satisfied with 5D.
IPL	2.1	Yes	JTT V1.0 ICD	Not Certified	JTT V1.0 was designed to interface with IPL V1.0. JITC attempted to test IPL V2.1, but JTT V1.0 could not communicate with IPL V2.1. Operational impact is minor since 5D can meet operational imagery requirements.
MIDB	2.0.2.1.1	Yes	JTT V1.0 ICD	Certified	Met all interoperability criteria.
RainDrop	3.0	No	JTT V1.0 ICD	Not Tested	Could not be tested at Beta II test site. JTT V1.0 is UNIX and RainDrop V3.0 is Windows NT. Beta II site would not bridge the two different operating systems. Operational impact is minor because workarounds are available.



# CONCLUSION

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- **JITC certification process is adaptive to PM development and acquisition strategies:**
  - Informing PMs of interoperability process
  - Early identification of system interoperability requirements
  - Active participation in PM testing activities
- **JITC reduces IOP costs through prudent use of existing test events.**
- **JITC ensures interoperable NSS/ITS systems as the sole interoperability certifier within DOD.**

**Our goal:**

**“Reduce risk to the Warfighter by ensuring interoperability and supportability throughout the life cycle of DOD systems”**

